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(54) **APPARATUS AND METHOD FOR RECOGNIZING A TAP GESTURE ON A TOUCH SENSING DEVICE**

(71) Applicant: **MONTEREY RESEARCH, LLC**, Santa Clara, CA (US)

(72) Inventors: **Tao Peng**, Starkville, MS (US); **Zheng Qin**, Shanghai (CN)

(73) Assignee: **MONTEREY RESEARCH, LLC**, Santa Clara, CA (US)

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This patent is subject to a terminal disclaimer.

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See application file for complete search history.

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Primary Examiner — Prabodh M Dharia
(74) *Attorney, Agent, or Firm* — Kunzler Law Group, PC

(57) **ABSTRACT**

Methods and apparatus include determine velocity of a detected presence in a first direction relative to a capacitive sensing surface, during a period of time, and determine velocity of the detected presence in a second direction relative to the capacitive sensing surface, during the period of time. Methods and apparatus detect a change in the determined velocity in the first direction at a first time, detect a change in the determined velocity in the second direction at a second time; and recognize a user command based on a difference between the first time and the second time.

20 Claims, 15 Drawing Sheets